Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

29. (Original) A method of fabricating a biopolymer array from pre-synthesized biopolymers, wherein the array has a surface that is prepared for linking with the pre-synthesized biopolymers, and wherein the pre-synthesized biopolymers are in solution for linking to the prepared surface, the method comprising the steps of:

adding a non-miscible fluid (NMF) to the array surface, the NMF being inert, immiscible and insoluble in aqueous solution; and

depositing the biopolymer solution on the array surface and linking the biopolymer to the surface.

30. (Original) The method of claim 29 wherein the biopolymer solution is deposited on the array surface through the NMF.

31. (Original) The method of claim 29 wherein the biopolymers are deprotected and in an aqueous solution, the method additionally comprising removing the NMF and unlinked biopolymer solution from the surface.

32. (Original) The method of Claim 29, wherein the step of adding the NMF comprises the step of applying a quantity of NMF to completely cover the array surface; and wherein the step of depositing comprises the step of loading the biopolymer solution into a pulsejet of a deposition system and ejecting the solution as droplets through the NMF to the array surface for linkage.

33. (Original) The method of claim 32 wherein the biopolymer in the loaded solution is deprotected.

34. (Original) The method of Claim 29, wherein the step of adding the NMF comprises the step of applying a quantity of NMF sufficient to cover each one of a

plurality of feature locations where the biopolymer will be linked on the array surface; and wherein the step of depositing comprises the step of loading a deprotected biopolymer solution into a pulsejet of a deposition system and ejecting the solution as droplets into the NMF at the feature location for linkage.

35. (Original) The method of Claim 29, wherein the step of adding the NMF comprises the step of immersing the prepared array surface into a quantity of NMF; and wherein the step of depositing comprises the step of loading a deprotected biopolymer solution into a pulsejet of a deposition system and ejecting the solution as droplets through the NMF to the array surface for linkage.

36. (Original) A method of shielding biosynthesis reactions and sensitive biosynthesis reactants from the ambient environment comprising the steps of:

(a) applying a non-miscible fluid (NMF) to one or more sites where the biosynthesis reactions take place, the NMF being inert and insoluble with respect to the biosynthesis reactions and the biosynthesis reactants, the NMF covering the one or more sites; and

(b) depositing one or more of the sensitive biosynthesis reactants through the NMF on the one or more sites.

37. (Withdrawn) A shield which protects sensitive biosynthesis reactions and biosynthesis reactants from the ambient environment comprising:

a non-miscible fluid (NMF) applied to cover the biosynthesis reactions, the NMF being inert and insoluble with respect to the biosynthesis reactions and the biosynthesis reactants.

38. (New) The method of Claim 36, wherein the applied NMF blocks evaporation of the biopolymer reactants from the one or more sites.

39. (New) The method of Claim 29, wherein linking the biopolymer to the surface is facilitated by the added NMF.

40. (New) The method of Claim 29, wherein the added NMF facilitates linking the biopolymer to the surface by blocking evaporation of the biopolymer solution while the solution is on the surface.

41. (New) The method of Claim 29, wherein the NMF has a density that is different from a density of the biopolymer solution.

42. (New) The method of Claim 29, wherein the NMF has a viscosity that is different than a viscosity of the biopolymer solution.

43. (New) The method of claim 29, wherein the NMF has one or both of a density and a viscosity different from that of the biopolymer solution, and wherein the biopolymer solution is deposited on the array surface through the NMF.

44. (New) The method of Claim 29, wherein the NMF is selected from heptane, octane, nonane, decane, undecane, dodecane, tridecane, tetradecane, pentadecane, hexadecane, heptadecane, cycloheptane, cyclooctane, cyclononane, and cyclodecane.

45. (New) A method of fabricating a biopolymer array from pre-synthesized biopolymers, wherein the array has a surface that is prepared for linking with the pre-synthesized biopolymers, and wherein the pre-synthesized biopolymers are in aqueous solution for linking to the prepared surface, the method comprising the steps of:

adding a non-miscible fluid (NMF) to the array surface, the NMF being inert, immiscible and insoluble in aqueous solution; and

depositing the biopolymer solution on the array surface and linking the biopolymer to the surface,

wherein the NMF covers the deposited biopolymer solution during linkage.

46. (New) The method of Claim 45, wherein the added NMF facilitates linking the biopolymer to the surface comprising blocking evaporation of the biopolymer solution while on the array surface.

47. (New) The method of claim 45, wherein the biopolymers are deprotected in the aqueous solution, and wherein the method additionally comprises removing the NMF and unlinked biopolymer solution from the surface.

48. (New) The method of Claim 45, wherein the NMF is a hydrocarbon selected from heptane, octane, nonane, decane, undecane, dodecane, tridecane, tetradecane, pentadecane, hexadecane, heptadecane, cycloheptane, cyclooctane, cyclononane, and cyclodecane.